

ABSTRACT OF THE DISCLOSURE

Provided is a scanning optical system in which the influence of structural birefringence resulting from a relationship between the arrangement direction
5 of a fine grating structure and polarization planes is reduced to obtain a preferable optical performance, and an image forming apparatus using the scanning optical system. In the scanning optical system, a light flux emitted from a light source unit is
10 deflected by a deflection unit. The light flux deflected by the deflection unit is guided onto a surface to be scanned by a scanning optical unit having a fine structural grating on at least one optical surface. The surface to be scanned is
15 scanned with the light flux. The fine structural grating has a triangular grating in which triangular grating parts are arranged in one dimensional direction. When a grating height of a triangular structure of the triangular grating is given by h , a
20 grating pitch thereof is given by P , and a wavelength of the light flux emitted from the light source unit is given by λ , conditions of $0.23\lambda \leq h$ and $0.52 < h/P$ are satisfied.